## Clam Lake Elk News [Second Quarter—April through June, 2005]

Current Status: During the period between the 2004 calving season and the 2005 calving season, the Clam Lake elk herd experienced its highest annual mortality ever. During the previous nine years the elk herd has experienced on average, four deaths annually. During this past intra-calving season period, the herd experienced 15 mortalities, three times the normal average. Compared to the same period the year before, when we experienced three elk mortalities, this recent period experienced a 367 percent increase. Post-calving season, it was estimated that we had between 116 and 123 elk depending whether one used the Ricker method or a rough accounting system for estimating population. Using proportions of marked to unmarked, the 15 observed mortalities would expand to 22 or 23 dead elk during this period, resulting in 94 elk remaining pre-2005 calving season under the Ricker model or 100 under the accounting system. We estimated that between 25 to 30 elk calves would be born during the 2005 calving season. If we assume the optimistic end of that, we would have between 124 and 130 elk post-calving season, depending on which estimate is used. However, we've already experienced four mortalities of calves during and post-calving season. This extrapolates to seven total dead calves. Post-2005 calving season, the total population estimate would be 117 under an accounting expanding from last year's Ricker model estimate, or 123 under the rough accounting estimate of last year.

Elk Research on the Clam Lake Herd: UW Madison's Monica Turner and Dean Anderson has developed a National Science Foundation grant and proposes GPS radio collaring 12 wolves and eight cow elk in and around the Clam Lake Elk herd to further investigate how wolves influence elk distribution on the landscape. UW Stevens Point has presented to the WI RMEF Policy Action Committee (PAC) a research grant application to investigate liver fluke and brain worm parasites on the Clam Lake Elk herd. This past year we saw an increase in elk mortalities associated with these parasites. The PAC and then Missoula both approved this research proposal. The project will initiate in January of 2006.

**Elk Health Issues:** [See the UWSP project described above.]

<u>Mortality</u>: On May 10 elk project staff investigated two bull elk deaths reported by fisherman following the opening of fishing season. We verified that bulls 100 and 116 both died along with bull 105 in February, breaking through the ice and drowning around February 28, 2005.

On May 29, 2005, while monitoring elk cows during the calving season, we met Greg Bornett, who is a co-owner of a cabin south of Clam Lake and west of CTH "GG." Greg had found, what looked to be a wolf killed calf back on April 24. He took us back into the kill site. Sign on site, spread of remains, and condition of remains indicated wolf kill. The animal was an unmarked female calf from the previous year. We assigned the designation of F141 for said animal.

On May 30, 2005 we investigated the death of M166 (mother F34). M166 was born with a weight of 18 pounds, half the normal weight and lower than any previously observed. F34 was eight- years- old and when recently observed, looked to be in good condition. M166 had moved about 50 meters from its original capture site. Follow up necropsy indicated he had not nursed and died due to malnutrition. Telemetry had indicated that F34 had persisted in the area even after M166 was collected and had been constantly with M166 since birth. When F34 was observed she looked healthy, no indication she was dry. On the other hand, though M166 was observed to want to nurse when handled, it appeared that he could not stand very well.

On June 10, F173 was found dead at the birth site. Signs indicated it had been born alive (slight stain and wear on hooves), but at 17 pounds it appeared to not have lived long. (F106, the mother was at site with calf just prior to discovery.)

On June 24 we investigated a mortality signal for F172. From feces and other sign present, it was apparent that F172 had been killed by a sow black bear with cubs. It was noted that about 30 meters away on a forest road, someone had dumped the remains of a large number of cleaned pan-fish. Apparently, this had attracted the sow, and when cow 18 approached the area with F172, the bears ambushed the calf. Telemetry indicated that cow 18 was moving through this area on her way to find a nursery group.

On June 27, elk project staff investigated a mortality signal for F169 (discrepancy of sex determination—Matt classified as male; Todd, who collected classified as female--I couldn't make a final determination when the transfer occurred because of the frozen condition, did look like maybe a female). A red right ear at the base and throughout indicated a possible ear infection and inflammation associated with the ear tag (protocol requires application of antibiotic ointment upon ear tagging). There was some indication that the animal had diarrhea. Although F169 weighed 40 pounds at 1-day-old and, weighed 63 pounds on June 27 (unusually good weight gain for a sick animal—we suspect that the illness was acute).

<u>Vehicle Collisions</u>: We're asking for help from anyone who may of observed the thief or thieves that stole the "elk crossing" sign just east of the intersection of CTH "S" and STH 77, on STH 77 (across from Boulder Lodge). I am offering a reward for information leading to the apprehension and conviction of the person or persons responsible. Certainly, a concern is the health and well being of the elk herd, and it's well known that vehicle collisions are one of the most important factors impacting the elk. However, of even greater concern is the health and well being of travelers through this area. Removal of these warning signs puts people and elk at risk. Thank you for your help.

**Public Education:** During this quarter we gave four elk presentations to 290 at the Statewide RMEF banquet, 190 at the St. Germain Banquet; 38 middle school students; six print media interviews; one television interview; and two radio interviews.

**Partnerships:** We cooperated with the ELF project dismantling planning process, making recommendations on keeping the ELF corridor in a forest opening condition; gating and maintaining access roads. We also presented 3 grant applications to the RMEF PAC, one to help fund our continuing elk monitoring (about \$25,000) and 2 habitat development projects (totaling about \$10,000). These projects were all approved by the PAC and Missoula with funding available for the 2006 fiscal year.

**Monitoring:** During this period we made 1,040 location determinations of cows and calves, plus 531 general locations for a total of 1,571 locations and a total of 2,309 mortality checks (mortality checks plus locations).

SPECIAL ELK FAMILY NEWS!: Mason Matthew McKay was born to Michelle and Matt McKay on June 21, 2005. Mason weighed in at 9 pounds, 9 oz., 21 inches long (poor Michelle). He already has the nickname around the Hayward DNR office as BULL McKay! (Good thing he didn't have antlers!)

**2005 Calving Season:** During the 2005 calving season we monitored 32 cows, searched 22 cows for which we found 17 calves. During the first several days of the calving season female calves predominated, then for more than a week there were almost nothing but male calves. Finally, during the last week a mix of cow and bull calves, resulting in a final count of nine male calves and eight female calves (finally a normal sex ratio). Unfortunately, three of the four subsequent calf mortalities have been female, leaving five female calves and eight male calves.

We estimate that between 25 to 30 calves were born this year; however, using proportion of marked to unmarked, observed calf mortality extrapolates to seven dead calves, leaving 18 to 23 calves.

**Upcoming events:** The DNR elk advisory committee is scheduled to convene on July 6. We need to get cracking on the three habitat improvement projects that are pending. Some preparation work has been done, but we need to make changes on the landscape. Herbicide has been delivered for the Torch River Lodge project, but we need to get the bull-dozer going on the Nausbaum and Scharp projects. Also, coming up in September will be the 2005 elk mating season (GO TEAM) and, Bugle Days! We need to prepare a lot of field work for those energized RMEF volunteers.

Laine Stowell & Matt McKay, July 5, 2005.

